

Title (en)

Fibrin compositions containing strontium compounds for use in bone growth

Title (de)

Fibrinzusammensetzungen mit Strontiumverbindungen zur Knochenbildung

Title (fr)

Compositions à base de fibrine contenant des composés de strontium pour stimuler l'ossification

Publication

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Application

EP 14003058 A 20080418

Priority

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Abstract (en)

The present invention relates to a composition comprising fibrinogen, thrombin and a strontium-containing compound for use in bone healing or bone growth, wherein strontium is present in a 25% strontium substituted particle, optionally wherein said composition is resorbed and replaced with tissue during the healing process.

IPC 8 full level

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Citation (applicant)

- US 5736132 A 19980407 - JUERGENSEN KAY [CH], et al
- US 5549904 A 19960827 - JUERGENSEN KAY [CH], et al
- US 2005119746 A1 20050602 - LIDGREN LARS [SE]
- US 2008065091 A1 20080313 - SCRIBNER ROBERT M [US], et al
- US 2008058828 A1 20080306 - REILEY MARK A [US], et al
- US 2007073307 A1 20070329 - SCRIBNER ROBERT M [US], et al
- US 4969888 A 19901113 - SCHOLTEN ARIE [US], et al
- US 5108404 A 19920428 - SCHOLTEN ARIE [US], et al
- EP 1405647 A1 20040407 - YLAENEN HEIMO [FI], et al
- EP 1655042 A1 20060510 - VIVOXID OY [FI]
- WO 9621628 A1 19960718 - BRINK MARIA [FI], et al
- WO 9117777 A2 19911128 - UNIV FLORIDA [US]
- WO 9112032 A1 19910822 - S E I P I SOCIETA ESPORTAZIONE [IT]
- US 2008066495 A1 20080320 - MOIMAS LOREDANA [FI], et al
- PARIKH SN, J. POSTGRAD. MED., vol. 48, 2002, pages 142 - 148
- DAHL, BONE, vol. 28, no. 4, pages 446 - 453
- FERRARO ET AL., CALCIF TISSUE INT., vol. 35, 1983, pages 258 - 60
- MEUNIER PJ ET AL., N ENIZL J MED., vol. 350, no. 5, 2004, pages 459 - 68
- KENDLER, CURR. OSTEOPOR. REP., vol. 4, no. 1, 2006, pages 34 - 9
- MARIE, CURR. OPIN. RHEUM., vol. 18, 2006, pages 11 - 5
- AMMANN, BONE, vol. 38, no. 2, 2006, pages 15 - 8
- CLOSE ET AL., EXPERT OPIN PHARMACOTHER, vol. 7, no. 12, 2006, pages 1603 - 15
- WONG, CHI-TAK: "Osteoconduction and osseointegration of a strontium-containing hydroxyapatite bioactive bone cement : in vitro and in vivo investigations", 2004, UNIVERSITY OF HONG KONG, article "Osteoconduction and osseointegration of a strontium-containing hydroxyapatite bioactive bone cement : in vitro and in vivo investigations"
- ZHAO ET AL., J BIOMED MATER RES B APPL BIOMATER., vol. 69, no. 1, 2004, pages 79 - 86
- PI ET AL., J. BIOL. CHEM., 2005

Citation (search report)

- [A] US 5618549 A 19970408 - PATAT JEAN-LOUIS [FR], et al
- [A] US 2006216321 A1 20060928 - LYU SUPING [US], et al
- [A] WO 2005082385 A1 20050909 - OSTEOLOGIX AS [DK], et al
- [A] US 5856356 A 19990105 - TSOUDELOS YANNIS [FR], et al
- [A] EP 1741436 A1 20070110 - SANTOSOLVE AS [NO], et al
- [A] US 2006148704 A1 20060706 - SCHENSE JASON [CH], et al
- [A] MARIE P J ET AL: "AN UNCOUPLING AGENT CONTAINING STRONTIUM PREVENTS BONE LOSS BY DEPRESSING BONE RESORPTION AND MAINTAINING BONE FORMATION IN ESTROGEN-DEFICIENT RATS", JOURNAL OF BONE AND MINERAL RESEARCH, NEW YORK, NY, US, vol. 8, no. 5, 1 May 1993 (1993-05-01), pages 607 - 615, XP000646111, ISSN: 0884-0431

Cited by

US11116647B2; US10687828B2; US10238507B2; US11116646B2

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US 2008260714 A1 20081023; AR 066245 A1 20090805; AU 2008242867 A1 20081030; AU 2008242867 B2 20140123; BR PI0811035 A2 20141021; BR PI0811035 B1 20180731; BR PI0811035 B8 20210525; CA 2686820 A1 20081030; CA 2686820 C 20160628;

CL 2008001171 A1 20081103; CN 101668549 A 20100310; CN 101668549 B 20140409; CN 103785058 A 20140514;
CN 103785058 B 20161207; CO 6251232 A2 20110221; EP 2142224 A2 20100113; EP 2142224 B1 20160323; EP 2823829 A1 20150114;
EP 2823829 B1 20160720; ES 2573327 T3 20160607; ES 2594081 T3 20161215; HK 1205961 A1 20151231; IL 201480 A0 20100531;
JP 2010525070 A 20100722; JP 2013216678 A 20131024; JP 5907656 B2 20160426; JP 6012551 B2 20161025; KR 101520114 B1 20150513;
KR 20100017158 A 20100216; MX 2009011268 A 20091102; TW 200902096 A 20090116; TW I556842 B 20161111;
WO 2008131154 A2 20081030; WO 2008131154 A3 20081224

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US 10536908 A 20080418; AR P080101685 A 20080422; AU 2008242867 A 20080418; BR PI0811035 A 20080418; CA 2686820 A 20080418;
CL 2008001171 A 20080423; CN 200880013518 A 20080418; CN 201410019473 A 20080418; CO 09119370 A 20091023;
EP 08746189 A 20080418; EP 14003058 A 20080418; ES 08746189 T 20080418; ES 14003058 T 20080418; HK 15106694 A 20150714;
IL 20148009 A 20091013; JP 2010506402 A 20080418; JP 2013130650 A 20130621; KR 20097024159 A 20080418;
MX 2009011268 A 20080418; TW 97114976 A 20080423; US 2008060720 W 20080418